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3689	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary	Application No.	Applicant(s)	
	10/807,031	DODGE ET AL.	
	Examiner	Art Unit	
	Fathi Abdelsalam	3689	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11/03/2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *13-15,17-19 and 21-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *13-15, 17-19, and 21-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is a non-final action in response to applicant's Request for Continued Examination (RCE) filed on 11/03/2009.

Response to Amendments

2. The amendment of 11/03/2009 has been received and entered. Claims 13-15, 17-19, and 21-34 are pending, of which claims 13, 32, and 33 are independent. Claims 13, 17, 26, 28, 30, 32, and 33 have been amended.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 13-15, 17-19, 21-31, and 34 are rejected under 35 U.S.C. 101 based on Supreme Court precedent, and recent Federal Circuit decisions, the Office's guidance to examiners is that a § 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780,787-88 (1876).

An example of a method claim that would <u>not</u> qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a §

101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Here, applicant's method steps, fail the first prong of the new Federal Circuit decision since they are not tied to another statutory class and can be performed without the use of a particular apparatus. Thus, independent claim 13 describes a method nominally tied, at best, to a computer system. In light of applicant's amendment to one of the eight recited method steps (i.e., the "calculating" step), Examiner maintains the rejection. How is the particular computer being utilized in regards to the other steps?

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 13-15, 17-19, 21, 22, and 25-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mahoney (US 5563991), in view of Guzelsu (US 6381587), and in further view of Albazz et al. (US 20020046081), hereinafter referred to as "Albazz."

7. Regarding **Claims 13, 32, and 33**:

Mahoney discloses a computer-implemented method, a system comprising at least one configured server, and an article of manufacture encoded with executable instructions that, when executed by at least one processor, cause the at least one processor ("FIG. 5 shows machine 150, which could be a personal computer, a workstation, or another data processing system. Machine 150 includes processor 152" [Col. 13, Line 19]), to perform operations comprising:

generating a graphical representation of the overlap statistics that indicates the degree, with respect to the monetary value, to which interactions, and overlap interactions between two entities occur and, based on two entities with a common element, overlap statistics characterizing a degree, with respect to the monetary value, to which interactions of the first entity and at least one common element overlap with interactions of the second entity and the at least one common element; and displaying the graphical representation of the overlap statistics to an employee of the first independent agency after the employee has been logged into a relationship-management system ("A "graphical representation" is a graphical feature that includes elements that are spatially related in a configuration that represents information" [Col. 6, Line 55]). See also: ("Input image data define an input image that shows a perimeter relationship representation, such as a Venn diagram or statechart" [Abstract]). See also at least: (FIG. 1 is a schematic diagram illustrating how an image showing a

perimeter relationship representation can be analyzed). See also: ("The perimeters data are used to obtain relationship data {statistics}" [Abstract]). See also: ("and if the two perimeters {*entities*} cross so that both enclose a shared area {*element*} and each encloses some non-shared area, the first and second sets have a shared subset, or an intersection" [Col. 1, Line 55]). See also: ("In a perimeter relationship representation, each perimeter represents a distinction between items that fall within a set or category and items that fall outside the set or category, and perimeters enclose areas in a way that indicates a relationship among distinctions they represent" [Col. 1, Line 45]).

Furthermore, the data relating to the specific entities and elements represented and displayed on the graphical representation is non-functional descriptive data, in this case: the first independent agency, the second independent agency, and the at least one common service-provider—and any other multiple number of agencies {entities} and service-providers and monetary value {elements} claimed throughout the subsequent dependent claims listed herein. Neither of these entities/elements affects the structural function of the applicant's overall claimed invention.

When presented with a claim comprising descriptive material, an Examiner must determine whether the claimed nonfunctional descriptive material should be given patentable weight. The Patent and Trademark Office (PTO) must consider all claim limitations when determining patentability of an invention over the prior art. In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401,404 (Fed. Cir. 1983). The PTO may not disregard claim limitations comprised of printed matter.

See Gulack, 703 F.2d at 1384-85,217 USPQ at 403; see also Diamond v. Diehr, 450 U.S. 175, 191,209 USPQ 1, 10 (1981). However, the examiner need not give patentable weight to descriptive material absent a new and unobvious functional relationship between the descriptive material and the substrate. See In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994); In re Ngai, 367 F.3d 1336, 1338, 70 USPQ2d 1862, 1863-64 (Fed. Cir. 2004). Thus, when the prior art describes all the claimed structural and functional relationships between the descriptive material and the substrate, but the prior art describes a different descriptive material than the claim, then the descriptive material is nonfunctional and will not be given any patentable weight. That is, such a scenario presents no new and unobvious functional relationship between the descriptive material and the substrate.

The Examiner asserts that the data represented entities/elements (such as the monetary value) on the graph adds little, if anything, to the claimed acts or steps and thus do not serve as limitations on the claims to distinguish over the prior art. MPEP 2106IV b 1(b) indicates that "nonfunctional descriptive material" is material "that cannot exhibit any functional interrelationship with the way the steps are performed". Any differences related merely to the meaning and information conveyed through data which does not explicitly alter or impact the steps is non-functional descriptive data. This rationale maintains for all of the subsequent dependent claims that recite similar and identical non-functional descriptions.

Mahoney, however, does not explicitly disclose the following elements that Guzelsu discloses below.

Guzelsu teaches:

accepting utilization information characterizing aspects of contracts entered into by each user one or more independent service-providers included in a plurality of independent service-providers ("a system for managing product and service usage from vendors is provided…[t]he system includes a database having contract information for vendors {*i.e. service-providers*}, entitlement information for users {*i.e. agencies*} and requests for a product or service from a vendor made by a user" [Col. 4, Line 28]). See also: ("service request will typically be accepted 48 and the system will prepare a formatted request for information 52 which will include vendor information, service information, optionally an expense code, cost, and contract billing start date and period, all of which information can be retrieved from database 24 and vendor contract records 28" [Col. 7, Line 11]).

based on the utilization information, identifying instances in which a user has entered into a contract with a common service-provider, calculating, using at least one computer that includes a processor and a portion of the utilization information that specifies monetary value of contracts associated with the identified instances agency ("The system then automatically calculates costs based on an inventory of actual requests for information, and calculates unit costs for services based on the various vendor pricing methodologies" [Col. 2, Line 58]). See also ("the present invention is a computerized system and method

for receiving invoices from vendors and tracking the amounts in the invoices against a database containing information about the vendor service contracts, user entitlements to that service, and actual usage of the service" [Col. 3, Line 51]);

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system, method and article of manufacture of Mahoney so as to have included contractual user and service-provider functionality, as taught by Guzelsu, in order to facilitate efficient contractual analyses, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

Moreover, Mahoney does not explicitly disclose the following elements that Albazz discloses below.

Albazz teaches:

creating a shell document for a service contract that relates to services purchased by both the first independent agency and the second independent agency; posting the shell document for the service contract in a secure collaboration space within the relationship-management system to enable collaboration on the shell document by employees of the first independent agency and the second independent agency; and notifying the second independent agency that the shell document has been posted in the secure collaboration space to enable employees of the second independent agency to review and make changes to the shell document in the secure collaboration

space ("FIG. 7 is an activity diagram showing the negotiation and preparation of a contract created according to the invention," [0033]).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system, method and article of manufacture of Mahoney so as to have included creating and posting digital-contractual document functionality, as taught by Albazz, in order to facilitate the drafting process of contractual negotiation, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

Additionally, the aforementioned cited art does not specifically mention agencies as being the particular users who contract with the service-providers, however, the nature of the particular users (i.e. agencies, businesses, individuals) has been deemed merely intended usage of the claimed invention and therefore accorded little patentable weight.

8. Regarding **Claim 14**:

Mahoney discloses the method of claim 13, wherein generating the graphical representation comprises:

rendering a first graphical element identifying the first entity of the plurality of entities; rendering a second graphical element identifying the second entity of the plurality of entities ("A 'graphical representation' is a graphical feature that includes elements that are spatially related in a configuration that represents information" [Col. 6, Line 55]). See also: ("Input image data define an input image

that shows a perimeter relationship representation, such as a Venn diagram or statechart" [Abstract]); and

rendering an intersection element corresponding to the first graphical element and the second graphical element, the intersection element visually indicating the degree, with respect to the monetary value, to which interactions of the first entity and the at least one common element overlap with interactions of the second entity and the at least one common element ("and if the two perimeters cross so that both enclose a shared area and each encloses some non-shared area, the first and second sets have a shared subset, or an intersection" [Col. 1, Line 55]).

Furthermore, the data relating to the specific entities and elements represented on the graphical representation is non-functional descriptive data, in this case: the first independent agency, the second independent agency, and the at least one common service-provider. Neither of these entities/elements affects the structural function of the applicant's overall claimed invention. See the full explanation dealing with non-functional descriptive material under claim 1 above.

9. Regarding **Claim 15**:

Mahoney discloses the method of claim 14, wherein the first graphical element comprises a heading of a row, the second graphical element comprises a heading of a column, and the intersection element comprises a cell corresponding to said row and said column ("The table can include a set label at the head of each row and an element label at the head of each column, with a

bullet in a space in a row and column if the row's set includes the column's element" [Abstract]).

10. Regarding **Claim 17**:

With the inclusion of a third independent agency {*entity*}, claim 17 recites substantially similar limitations to claim 1 and is therefore rejected using the same art and rational set forth above.

11. Regarding **Claim 18**:

Mahoney discloses the method of claim 14, further comprising determining a list including service-providers from whom services were purchased by both the first agency and the second agency, wherein generating the graphical representation further comprises:

displaying the determined list including service-providers from whom services were purchased by both the first agency and the second agency, in association with the intersection element ("The relationship data can include a list of sublists, with each sublist including a set identifier identifying a set and a list of item identifiers identifying items within the set" [Col. 2, Line 65]).

Furthermore, the data on the list is non-functional descriptive data. See the full explanation on non-functional descriptive data under claim 1 above.

12. Regarding **Claim 19**:

Mahoney discloses the method of claim 14, further comprising determining a list including types of services purchased by the first agency from a service-provider from whom services were purchased by both the first agency and the second agency, wherein generating the graphical representation further comprises:

displaying the determined list including types of services purchased by the first agency from a service-provider from whom services were purchased by both the first agency and the second agency, in association with the intersection element ("The relationship data can include a list of sublists, with each sublist including a set identifier identifying a set and a list of item identifiers identifying items within the set" [Col. 2, Line 65]).

Furthermore, the data on the list is non-functional descriptive data. See the full explanation on non-functional descriptive data under claim 1 above.

13. Regarding **Claim 21**:

Mahoney discloses the method of claim 14 wherein:

Calculating overlap statistics characterizing the degree to which interactions of the first entity and at least one common element overlap with interactions of the second entity and the at least one common element ("A "graphical representation" is a graphical feature that includes elements that are spatially related in a configuration that represents information" [Col. 6, Line 55]). See also: ("Input image data define an input image that shows a perimeter relationship representation, such as a Venn diagram or statechart" [Abstract]).

See also: ("The perimeters data are used to obtain relationship data" [Abstract]). See also at least: (FIG. 1 is a schematic diagram illustrating how an image showing a perimeter relationship representation can be analyzed.) See also: ("and if the two perimeters cross so that both enclose a shared area and each encloses some non-shared area, the first and second sets have a shared subset, or an intersection" [Col. 1, Line 55]). See also: ("In a perimeter relationship representation, each perimeter represents a distinction between items {*entities*} that fall within a set or category and items that fall outside the set or category, and perimeters enclose areas in a way that indicates a relationship among distinctions they represent" [Col. 1, Line 45]); comprises:

rendering the intersection element comprises rendering an intersection element that displays the total shared elemental quantity from the at least one common element by the first entity and the second entity and that displays the percentage of the shared elemental quantity from the at least one common element by the first independent entity and the second independent entity with respect to the total shared elemental quantity collectively shared from all elements by the first entity and the second entity ("and if the two perimeters {*entities*} cross so that both enclose a shared area {*element*} and each encloses some non-shared area, the first and second sets have a shared subset, or an intersection" [Col. 1, Line 55]).

Furthermore, the data relating to the specific entities and elements represented and displayed on the graphical representation is non-functional descriptive data, in this case: the first independent agency {*first entity*}, the

second independent agency {*second entity*}, the at least one common service-provider {*element*}, and the total value and percentage of services collectively purchased {*shared elemental quantity*}. Neither of these entities/elements affects the structural function of the applicant's overall claimed invention. See the full explanation dealing with non-functional descriptive material under claim 1 above.

Mahoney, however, does not explicitly disclose the following elements that Guzelsu discloses below.

Guzelsu teaches:

computing a total value of services collectively purchased from the at least one common service-provider by the first independent agency and the second independent agency ("The system then automatically calculates costs based on an inventory of actual requests for information, and calculates unit costs for services based on the various vendor pricing methodologies" [Col. 2, Line 58]). See also at least: ("The system looks up the total service count 901 and quantity 902 from the stored data information in the database" [Col. 9, Line 45]).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to have modified the method of Mahoney so as to have included value computation functionality, as taught by Guzelsu, in order to facilitate efficient value analyses, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

Additionally, both Mahoney and Guzelsu do not specifically mention computing a percentage of the total value of services collectively purchased from

the at least one common service provider by the first independent agency and the second independent agency with respect to a total value of services collectively purchased from all service-providers by the first independent agency and the second independent agency, however, it would have been obvious to one of ordinary skill in the art, at the time of applicant's claimed invention, to recognize and appreciate the fact that anyone with a basic mathematical understanding could calculate percentages on such data; and lastly, one of ordinary skill in the art would also acknowledge the obviousness of having more than one agency/user solicit a certain service from one or more vendors/providers.

14. Regarding **Claim 22**:

Claim 22 recites substantially similar limitations to claim 21 and is therefore rejected using the same art and rational set forth above.

Mahoney further discloses the method of claim 14 wherein:

calculating overlap statistics characterizing the degree to which interactions of the first independent agency and at least one common service-provider overlap with interactions of the second independent agency and the at least one common service-provider comprises computing a number of common service-providers that provide services to both the first independent agency and the second independent agency (“The list of sublists indicates a relationship among distinctions represented by perimeters because it indicates which

elements are in each perimeter, thus indicating which elements are shared and which are not shared" [Col. 18, Line 60]); and

rendering the intersection element comprises rendering an intersection element that displays the number of common service-providers that provide services to both the first independent agency and the second independent agency. See Figure 9.

Furthermore, the data relating to the specific entities and elements represented and displayed on the graphical representation is non-functional descriptive data, in this case: the first independent agency {*first entity*}, the second independent agency {*second entity*}, the at least one common service-provider {*element*}. Neither of these entities/elements affects the structural function of the applicant's overall claimed invention. See the full explanation dealing with non-functional descriptive material under claim 1 above.

15. Regarding **Claim 25**:

Mahoney discloses the method of claim 13, wherein: generating the graphical representation of the overlap statistics comprises:

displaying a table that includes, for each of the multiple pairs of independent agencies ("The relationship data can be used to obtain output image data defining an output image that includes precisely formed version of the representation or another graphical representation of the relationship, such as a table" [Mahoney Abstract]);

displaying, for at least one of the multiple pairs of independent agencies, a listing of common service-providers ("The relationship data can include a list of sublists, with each sublist including a set identifier identifying a set and a list of item identifiers identifying items within the set" [Col. 2, Line 65]).

Furthermore, the data on the list is non-functional descriptive data. See the full explanation on non-functional descriptive data under claim 1 above.

Mahoney, however, does not explicitly disclose the following elements that Guzelsu discloses below.

Guzelsu teaches:

Calculating a total value of services purchased from each of the common service-providers included in the list by each of the agencies included in the corresponding pair; and the total value of services collectively purchased from common service- providers by the agencies included in the corresponding pair; and calculating, the overlap statistics comprises calculating, for each of multiple pairs of independent agencies, a total value of services collectively purchased from common service-providers by the agencies included in the corresponding pair ("The system then automatically calculates costs based on an inventory of actual requests for information, and calculates unit costs for services based on the various vendor pricing methodologies" [Guzelsu Col. 2, Line 58]). See also at least: ("The system looks up the total service count 901 and quantity 902 from the stored data information in the database" [Col. 9, Line 45]).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to have modified the method of Mahoney so as to have

included value computation functionality, as taught by Guzelsu, in order to facilitate efficient value analyses, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

16. Regarding **Claim 26**:

With the inclusion of a third independent agency {*entity*} and multiple common service-providers {elements}, claim 26 recites substantially similar limitations to claim 1 and is therefore rejected using the same art and rational set forth above.

Mahoney further disclose:

generating the graphical representation of the overlap statistics comprises generating a Venn diagram that includes a first shape corresponding to the first independent agency, a second shape corresponding to the second independent agency, and a third shape corresponding to the third independent agency, the first shape, the second shape, and the third shape overlapping within the Venn diagram.

See Figure 9. See also: ("Input image data define an input image that shows a perimeter relationship representation, such as a Venn diagram or statechart" [Abstract]).

17. Regarding **Claim 27**:

Mahoney discloses the method of claim 26 wherein:

the second degree to which interactions of the first independent agency and the second independent agency with the multiple common service-providers overlap comprises a second degree to which interactions of the first independent agency and the second independent agency with the multiple common service-providers overlap, but do not overlap with interactions of the third independent agency;

the third degree to which interactions of the first independent agency and the third independent agency with the multiple common service-providers overlap comprises a third degree to which interactions of the first independent agency and the third independent agency with the multiple common service-providers overlap, but do not overlap with interactions of the second independent agency; and

the fourth degree to which interactions of the second independent agency and the third independent agency with the multiple common service-providers overlap comprises a fourth degree to which interactions of the second independent agency and the third independent agency with the multiple common service-providers overlap, but do not overlap with interactions of the first independent agency.

See Figure 9.

Furthermore, the data relating to the specific entities and elements represented and displayed on the graphical representation is non-functional descriptive data, in this case: the first independent agency, the second independent agency, and the at least one common service-provider—and any

other multiple number of agencies {entities} and service-providers {elements} claimed throughout the subsequent dependent claims listed herein. Neither of these entities/elements affects the structural function of the applicant's overall claimed invention. See the full explanation dealing with non-functional descriptive material under claim 1 above.

18. Regarding **Claim 28**:

Mahoney discloses the method of claim 26 wherein generating the Venn diagram comprises:

generating a first overlap region that relates to the overlap statistics corresponding the multiple common service-providers that interact with each of the first independent agency, the second independent agency, and the third independent agency;

generating a second overlap region that relates to the overlap statistics corresponding the multiple common service-providers that interact with each of the first independent agency and the second independent agency, but do not interact with the third independent agency;

generating a third overlap region that relates to the overlap statistics corresponding the multiple common service-providers that interact with each of the first independent agency and the third independent agency, but do not interact with the second independent agency; and

generating a fourth overlap region that relates to the overlap statistics corresponding the multiple common service-providers that interact with each of

the second independent agency and the third independent agency, but do not interact with the first independent agency.

See Figure 9. See also at least: ("Input image data define an input image that shows a perimeter relationship representation, such as a Venn diagram or statechart" [Abstract]).

Furthermore, the data relating to the specific entities and elements represented and displayed on the graphical representation is non-functional descriptive data, in this case: the first independent agency, the second independent agency, and the at least one common service-provider—and any other multiple number of agencies {entities} and service-providers {elements} claimed throughout the subsequent dependent claims listed herein. Neither of these entities/elements affects the structural function of the applicant's overall claimed invention. See the full explanation dealing with non-functional descriptive material under claim 1 above.

19. Regarding **Claim 29**:

Claim 29 recites substantially similar limitations to claim 28 and is therefore rejected using the same art and rational set forth above.

Mahoney discloses the method of claim 28, as outlined above, but Mahoney fails to explicitly disclose total valuation functionality.

However, Guzelsu teaches:

in the overlap regions, a total value of services collectively purchased from the multiple common service-providers providing services to each independent

agency; and a total number of the multiple common service-providers providing services to each independent agency: the first independent agency, the second independent agency, and the third independent agency, respectively ("The system then automatically calculates costs based on an inventory of actual requests for information, and calculates unit costs for services based on the various vendor pricing methodologies" [Guzelsu Col. 2, Line 58]). See also at least: ("The system looks up the total service count 901 and quantity 902 from the stored data information in the database" [Col. 9, Line 45]).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to have modified the method of Mahoney so as to have included value computation functionality, as taught by Guzelsu, in order to facilitate and display efficient value and service analyses, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

Additionally, both Mahoney and Guzelsu do not specifically mention agencies as being the particular users whom contract with the service-providers, however, the nature of the particular users (i.e. agencies, businesses, individuals) has been deemed merely intended usage of the claimed invention and therefore accorded little patentable weight.

20. Regarding **Claim 30**:

Mahoney discloses the method of claim 28 wherein generating the Venn diagram further comprises:

generating a first non-overlapping region that corresponds the first independent agency and that relates to statistics for service-providers that interact with the first independent agency, but do not interact with the second independent agency and the third independent agency;

generating a second non-overlapping region that corresponds the second independent agency and that relates to statistics for service-providers that interact with the second independent agency, but do not interact with the first independent agency and the third independent agency; and

generating a third non-overlapping region that corresponds the third independent agency and that relates to statistics for service-providers that interact with the third independent agency, but do not interact with the first independent agency and the second independent agency.

See Figure 4, Block 100, detailing two entities that do not share any common areas, as such, displaying non-overlapping regions. See also: ("Input image data define an input image that shows a perimeter relationship representation, such as a Venn diagram or statechart" [Abstract]).

21. Regarding **Claim 31**:

Claim 31 recites substantially similar limitations to claim 30 and is therefore rejected using the same art and rational set forth above.

Mahoney discloses the method of claim 30, as outlined above, but Mahoney fails to explicitly disclose total valuation functionality.

However, Guzelsu teaches:

in the non-overlap regions, a total value of services collectively purchased from the service-providers that interact with each independent agency; and a total number of the service-providers that interact with each of the first independent agency, the second independent agency, and the third independent agency, respectively ("The system then automatically calculates costs based on an inventory of actual requests for information, and calculates unit costs for services based on the various vendor pricing methodologies" [Guzelsu Col. 2, Line 58]). See also at least: ("The system looks up the total service count 901 and quantity 902 from the stored data information in the database" [Col. 9, Line 45]).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to have modified the method of Mahoney so as to have included value computation functionality, as taught by Guzelsu, in order to facilitate and display efficient value and service analyses, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

Additionally, both Mahoney and Guzelsu do not specifically mention agencies as being the particular users whom contract with the service-providers, however, the nature of the particular users (i.e. agencies, businesses, individuals) has been deemed merely intended usage of the claimed invention and therefore accorded little patentable weight.

22. Regarding **Claim 34**:

Claim 34 recites substantially similar limitations to claim 21 and is therefore rejected using the same art and rational set forth above.

23. **Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mahoney (US 5563991), in view of Guzelsu (US 6381587), and in further view of Albazz et al. (US 20020046081), as applied above in the rejection of claims 13-19, 21, 22, and 25-33, and further in view of Kennedy (US 6031547).**

24. Regarding **Claim 23**:

The obvious combination of Mahoney and Guzelsu discloses the method of claim 13 as outlined in the above rejections under 35 U.S.C. 103(a), wherein generating, using the computer, the overlap statistics comprises generating overlap statistics for each of multiple pairs of independent agencies {entities}, further comprising:

based on the overlap statistics, identifying a subset of the multiple pairs for which a degree of overlap between interactions of agencies included in a pair with common service- providers is highest ("The list of sublists indicates a relationship among distinctions represented by perimeters because it indicates which elements are in each perimeter, thus indicating which elements are shared and which are not shared" [Mahoney Col. 18, Line 60]);

wherein generating the graphical representation of the overlap statistics comprises:

displaying a table that includes at least one overlap statistic for each of the multiple pairs of independent agencies ("The relationship data can be used to obtain output image data defining an output image that includes precisely formed version of the representation or another graphical representation of the relationship, such as a table" [Mahoney Abstract]);

labeling, in the table, the identified subset of the multiple pairs for which the degree of overlap between interactions of agencies included in a pair with common service-providers is highest ("The table can include a set label at the head of each row and an element label at the head of each column, with a bullet in a space in a row and column if the row's set includes the column's element" [Mahoney Abstract]); and

displaying additional overlap statistics for each of the multiple pairs included in the identified subset ("processor 152 presents and modifies image 162 on display 154, so that the user can continue to provide signals until image 162 shows a desired perimeter relationship representation. Then the user can provide a signal requesting that processor 152 provide data defining image 162" [Mahoney Col. 13, Line 28]).

But, neither Mahoney, nor Guzelsu explicitly disclose that the subset of the multiple pairs utilizes a pre-determined threshold number of pairs.

However, Kennedy teaches a method, wherein the subset of the multiple pairs includes a pre-determined threshold number of pairs ("If a deviation of a graph beyond a predetermined threshold occurs" [Abstract]).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the combined obvious method of Mahoney and Guzelsu as outlined in the aforementioned 35 U.S.C. 103(a) rejection, so as to have included a method utilizing setting a pre-determined threshold number, as taught by Kennedy, in order to more efficiently gauge the analysis of entities/elements, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

25. Regarding **Claim 24**:

The obvious combination of Mahoney, Guzelsu, and Kennedy disclose the method of claim 23 as outlined in the above rejections under 35 U.S.C. 103(a), wherein:

displaying the table that includes at least one overlap statistic for each of the multiple pairs of independent agencies comprises displaying a table ("The relationship data can be used to obtain output image data defining an output image that includes precisely formed version of the representation or another graphical representation of the relationship, such as a table" [Mahoney Abstract]);

displaying additional overlap statistics for each of the multiple pairs included in the identified subset comprises: displaying, for each of the multiple pairs included in the identified subset, a number of common service-providers contracted by both of the agencies included in the corresponding pair, and

displaying, for each of the multiple pairs included in the identified subset, a list ("The list of sublists indicates a relationship among distinctions represented by perimeters because it indicates which elements are in each perimeter, thus indicating which elements are shared and which are not shared" [Mahoney Col. 18, Line 60]);

Mahoney, however, does not explicitly disclose the following elements that Guzelsu discloses below.

Guzelsu teaches:

for each of the multiple pairs of independent agencies, a total value of services collectively purchased from common service-providers by the agencies included in the corresponding pair ("The system then automatically calculates costs based on an inventory of actual requests for information, and calculates unit costs for services based on the various vendor pricing methodologies" [Guzelsu Col. 2, Line 58]). See also at least: ("The system looks up the total service count 901 and quantity 902 from the stored data information in the database" [Col. 9, Line 45]).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to have modified the method of Mahoney so as to have included value computation functionality, as taught by Guzelsu, in order to facilitate efficient value analyses, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

Additionally, neither Mahoney nor Guzelsu explicitly disclose the subset of the multiple pairs utilizing a pre-determined threshold number of programs for each entity.

However, Kennedy teaches a method, wherein the subset of the multiple pairs includes a pre-determined threshold number of programs for each entity ("If a deviation of a graph beyond a predetermined threshold occurs" [Abstract]).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the combined obvious method of Mahoney and Guzelsu as outlined in the aforementioned 35 U.S.C. 103(a) rejection, so as to have included a method utilizing setting a pre-determined threshold number, as taught by Kennedy, in order to more efficiently gauge the analysis of entities/elements, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results. Also, the nature of the obvious particular set threshold number (i.e. "the threshold number of programs being a threshold number of programs that have the highest contribution to the value of services purchased from common service-providers") has been deemed merely intended usage of the claimed invention and therefore accorded little patentable weight. In other words, one could set a threshold number for an innumerable number of circumstances.

Additionally, both Mahoney and Guzelsu do not specifically mention displaying, for each of the multiple pairs included in the identified subset, an average number of contracts per service-provider entered into by the agencies

included in the corresponding pair, however, it would have been obvious to one of ordinary skill in the art, at the time of applicant's claimed invention, to recognize and appreciate the fact that anyone with a basic mathematical understanding could calculate an average on such data.

Response to Arguments

26. Applicant's arguments filed 11/03/2009 have been fully considered but they are not persuasive.

27. Regarding the rejection of claims under 35 U.S.C. §103:

Applicant's arguments, with respect to claims 13-15, 17-19, and 21-34 have been considered but are moot in view of the new ground(s) of rejection under 35 U.S.C. 103(a). Pertinent citations, arguments/positions, and lines of reasoning have been set forth above in the rejection.

Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Guheen et al., US 7315826 B1, teaches comparatively analyzing vendors of components required for a web-based architecture. Bowman-Amuah, US 6556659 B1, teaches service level management in a hybrid network architecture.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fathi Abdelsalam whose telephone number is (571) 270-3517. The examiner can normally be reached on Monday to Thursday 8:00-5:00pm ET.

30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janice Mooneyham can be reached on (571) 272-6805. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

31. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. A./
Examiner, Art Unit 3689

/Tan Dean D. Nguyen/
Primary Examiner, Art Unit 3689
1/16/10